CITY OF Fremont

Traffic Signal System Upgrade
The Planning Stage

Presentation by

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Project Background

- **Project: Replace central system and all field controllers**
- 145 traffic signals, 134 interconnected
- Interconnect is copper twisted-pair
- Had Multisonics VMS 330 central system with 820A & 870 controllers
- Failing VMS → Loss of signal coordination

Project Schedule

Milestones	Start	End
Defined Existing Conditions, Goals, & Objectives	April 2001	--
RFI, Vendor Presentations, System Beta Test, RFP	May 2001	December 2001
System Selection / Award	--	February 2002
Central System Setup	June 2002	June 2002
Field Controllers Deployed	June 2002	February 2003
60-Day Operational Test and System Acceptance	TBD	

Goals and Objectives

- Greater system reliability and support
- Reduce reliability in center to field communications
- Maximize COTS products, reduce reliability on single vendor
- Turnkey solution
- Migrate to TS2
- NTCIP for center-to-field
- Accessibility and portability
- Integration of other field devices (CCTV, EVP, MMU, BBS, etc.)
- Silicon Valley Smart Corridor

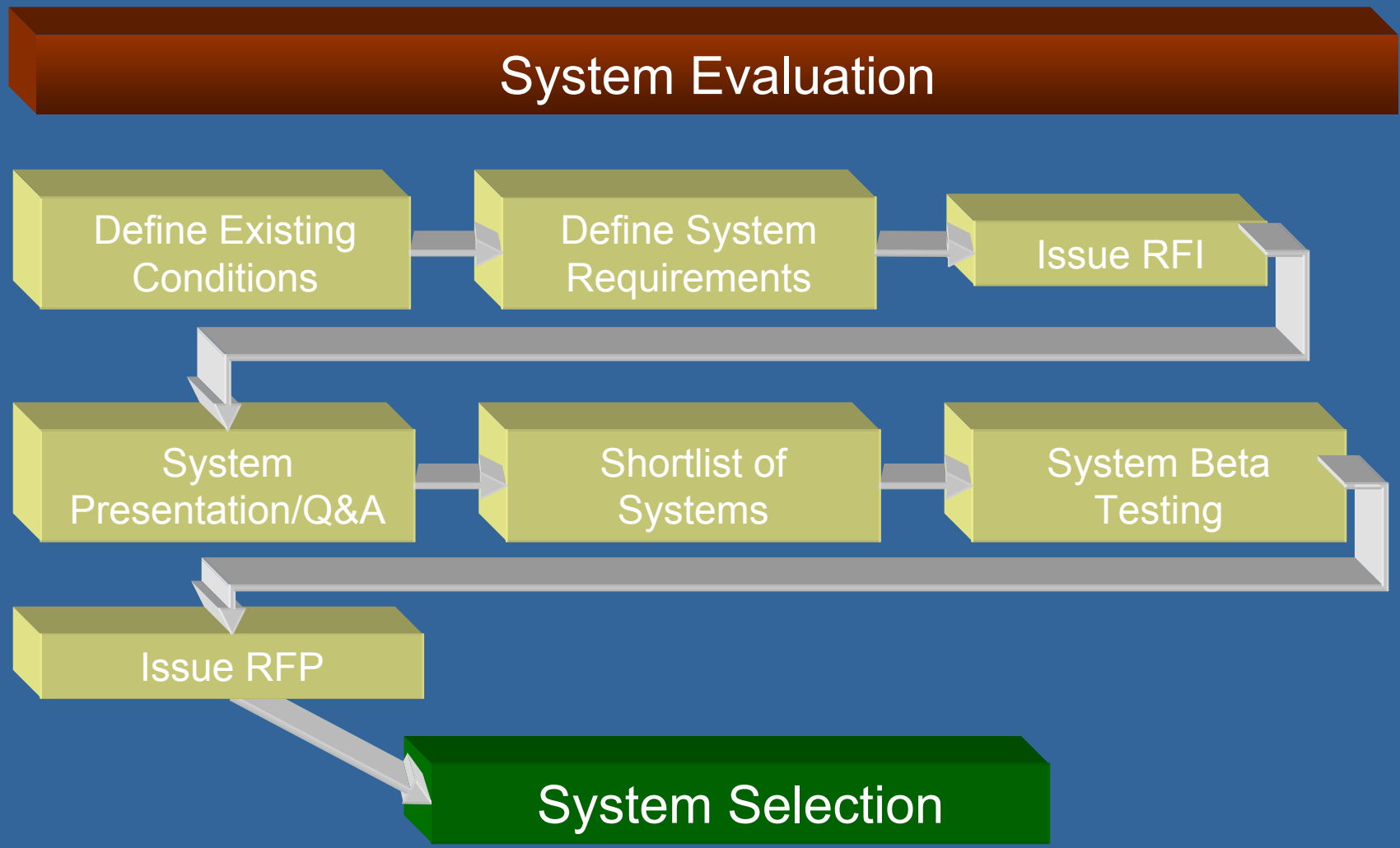
Understand the Key Issues

- Functional features
- Company integrity
- Current deployments
- Current user satisfaction
- Customer support
- Controller compatibility
- NTCIP related issues
- Cost

System Acquisition

- Concerns about traditional low-bid acquisition approach
- Disadvantage 1: Write semi-generic specification. Keeps pricing competitive but could end up with undesirable system.
- Disadvantage 2a: Write a very specific specification. Guarantee system of choice but pricing is subject to vendor control.
- Disadvantage 2b: Vendor has lock on system. May require contractor purchase of other items (video detection, cabinets, etc.). Pricing subject to vendor control.
- Disadvantage 3: Contractor acts as middle-man. Agency pays a mark-up and works directly with vendor anyways.

Our Acquisition Approach



Look for Other Opportunities

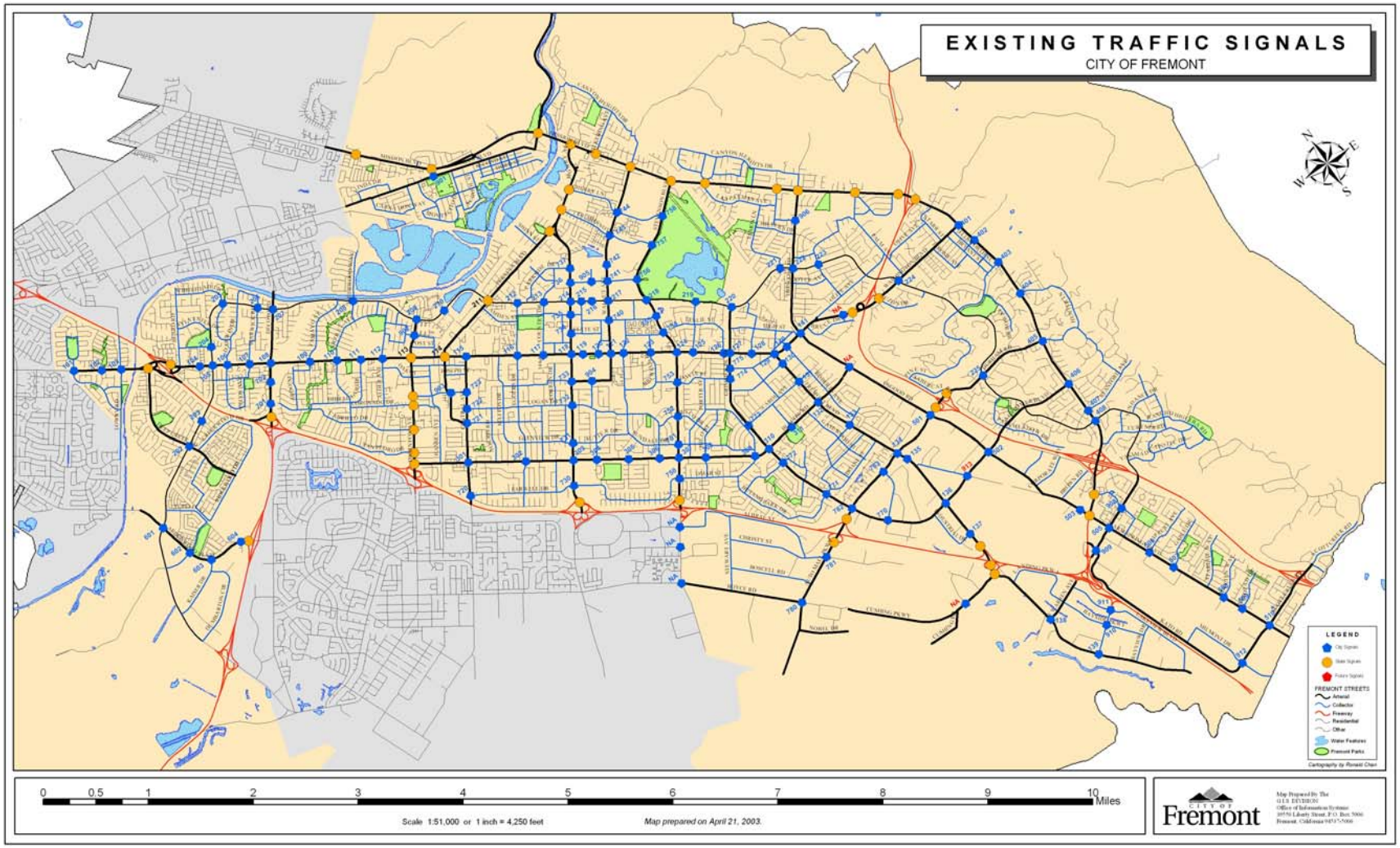
- TMC Upgrade
- Reconfigure Interconnect
- Standardize Signal Timing
- System Management

Recommendations & Lessons Learned

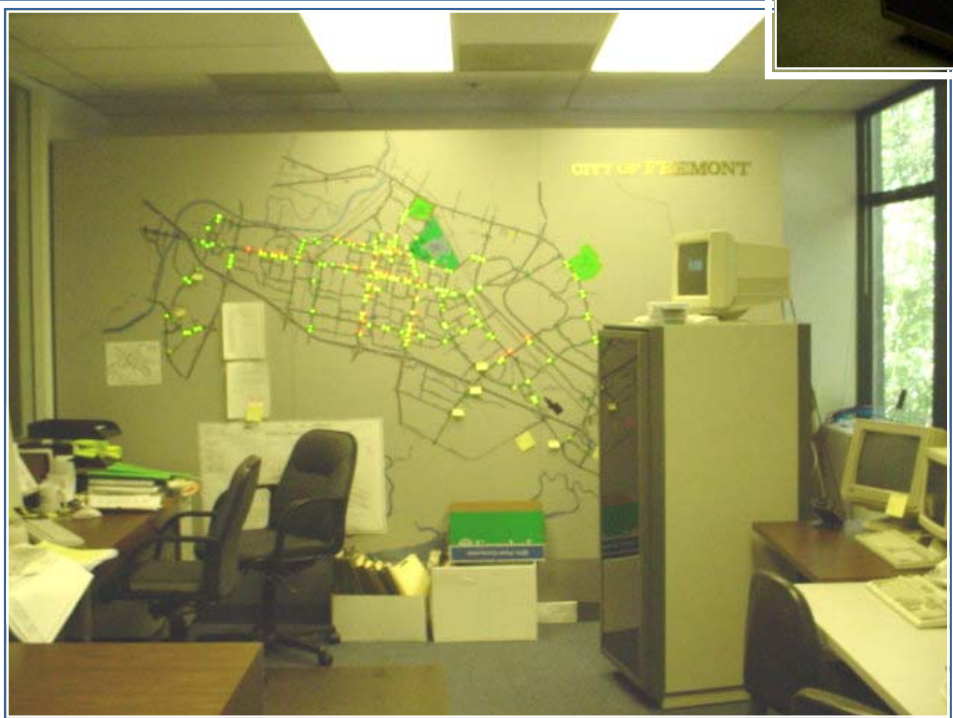
- Separate signal system procurement from more traditional contractor bid items
- Critical scrutiny of system features (verify, verify, verify)
- Plan transition from old to new system
- Allow flexibility in your technology
- Get support and advice from your IS staff

Questions and Answers

City Traffic Signals



Fremont TMC Before



Fremont TMC “After”

Communications Channel Groupings